The Education Sciences Reform Act

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Summary

The Education Sciences Reform Act (ESRA, Title I of P.L. 107-279) established the Institute of Education Sciences (IES) as an independent research arm of the Department of Education (ED). The IES Director, appointed by the President with the advice and consent of the Senate, serves a six-year term and is advised by a technical panel composed primarily of educational researchers, the National Board of Educational Sciences (NBES).

The IES consists of four research centers, the National Center for Education Research (NCER), the National Center for Education Statistics (NCES), the National Center for Education Evaluation and Regional Assistance (NCEE), and the National Center for Special Education Research (NCSER). NCER sponsors research leading to the accumulation of knowledge and understanding of education. NCES collects and analyzes education information and statistics in a manner that meets the highest methodological standards. NCEE supports evaluation, technical assistance, development, and dissemination activities. NCSER sponsors research to expand knowledge and understanding of the needs of infants, toddlers, and children with disabilities.

Along with ESRA, P.L. 107-279 enacted two additional acts authorizing programs and activities operating within IES—the Educational Technical Assistance Act (ETAA, Title II of P.L. 107-279) and the National Assessment of Educational Progress Authorization Act (NAEPAA, Title III of P.L. 107-279). ETAA authorizes IES to make grants to local entities for the purpose of supporting varied technical assistance activities and to states for statewide, longitudinal data systems. NAEPAA authorizes IES to conduct a national assessment, state assessments, and a long-term trend assessment in reading and mathematics.

Authorities under ESRA expired in FY2008; however, funding for ESRA programs and activities has continued through annual appropriations legislation. The 113th Congress may act on legislation to reauthorize ESRA.
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Introduction

The federal government has supported efforts to gather educational statistics for nearly 150 years. Collecting statistics and facts on the condition and progress of education was the core function of the earliest version of the Office of Education (P.L. 39-73, enacted March 2, 1867). However, a coordinated national undertaking resembling today’s research and statistics effort did not begin to take shape until the mid-1970s with the creation of the National Institute of Education (NIE) under the Education Amendments of 1972 (P.L. 92-318) and the National Center for Education Statistics (NCES) under the Education Amendments of 1974 (P.L. 93-380). In 1985, the NIE was replaced by the Office of Educational Research and Improvement (OERI) through executive authority. The present-day federal educational research and statistics effort is carried out by the Institute of Education Sciences (IES), which replaced OERI in 2002 through provisions adopted with the passage of the Education Sciences Reform Act (ESRA, Title I of P.L. 107-279).

ESRA established IES as an independent research institute housed within the Department of Education (ED) headed by a Director, appointed by the President with the advice and consent of the Senate, to serve a term of six years. ESRA also established a technical panel composed primarily of researchers, the National Board of Educational Sciences (NBES), to advise the Director on the policies of the institute and approve research priorities and procedures for technical and scientific peer review. Additionally, this panel is charged with assessing the progress of IES and making recommendations for improvement.

ESRA established three national centers to conduct the work of IES in three areas: the National Center for Education Research (NCER), the National Center for Education Statistics (NCES), and the National Center for Education Evaluation and Regional Assistance (NCEE). Subsequently, P.L. 108-446, which reauthorized the Individuals with Disabilities Education Act (IDEA), amended ESRA adding a fourth center to operate within IES, the National Center for Special Education Research (NCSER).

Along with ESRA, P.L. 107-279 enacted two additional acts authorizing programs and activities operating within IES—the Educational Technical Assistance Act (ETAA, Title II of P.L. 107-279) and the National Assessment of Educational Progress Authorization Act (NAEPAA, Title III of P.L. 107-279). ETAA authorizes IES to make grants to local entities for the purpose of supporting varied technical assistance activities and to states for statewide, longitudinal data systems. NAEPAA authorizes IES to conduct a national assessment, state assessments, and a long-term trend assessment in reading and mathematics in grades 4, 8, and 12.

Overall, while many changes that affect federal educational research and statistics activities were enacted through ESRA, among the particularly prominent changes were those leading to the creation of an independent research institute and those specifying “scientifically-based” or “scientifically-valid” standards for research. Under the provisions of ESRA, IES operates as an...
independent institute and is afforded more freedom from ED than OERI had as an office (headed by an Assistant Secretary) within ED. At the same time, ESRA provides for greater oversight of the work and work processes of IES by a technical panel (NBES) in comparison to what was required under provisions in OERI’s authorizing legislation. ESRA also notably goes further than prior authorizing legislation in terms of specifying standards for educational research supported under the act. Specifically, ESRA defines and requires scientifically based research standards, scientifically valid research, and scientifically valid educational evaluations. Collectively the provisions outlining and requiring adherence to these “scientifically-based” or “scientifically-valid” standards have in effect signaled that methodological rigor is a top priority for IES-supported research.

Authorities under ESRA expired in FY2008; however, funding for ESRA programs and activities has continued through annual appropriations legislation. The 113th Congress may act on legislation to reauthorize ESRA. This report provides a concise description of programs and authorities established by ESRA as amended. It is organized in a manner that aligns with the legislation, P.L. 107-279, which enacted ESRA along with two other measures, ETAA and NAEPPAA. Should reauthorization proposals advance in the 113th Congress, this report will describe major changes included in reauthorization proposals.

Education Sciences Reform Act

Institute of Education Sciences

Title I, Part A, of ESRA establishes IES as a research institute within ED intended to provide “national leadership in expanding fundamental knowledge and understanding of education from early childhood through postsecondary study.” The aim of IES is to provide parents, educators, students, researchers, policy makers, and the general public with information on the condition and progress of education, on practices that improve academic achievement, and on the effectiveness of federal education and other education programs. IES is authorized to carry out these aims by compiling statistics, conducting research and evaluations, and disseminating information.

Under the provisions of ESRA, the IES Director is appointed by the President with the advice and consent of the Senate. The Director is selected from individuals with expertise in the fields of research, statistics, or evaluation in education. The Director is authorized to carry out specific duties, such as proposing research priorities; establishing procedures for technical and peer review; advising the Secretary on matters related to research and evaluation; and ensuring that conducted activities are objective, secular, neutral, and non-ideological and are free of partisan political influence and racial, cultural, or regional bias.

(...continued)


4 The provisions outlining and requiring adherence to “scientifically-based” or “scientifically-valid” standards have received considerable attention, particularly for the emphasis they place on random assignment and other experimental designs for studies making claims of causal relationships. See ESRA, §102(18) & (19).

5 ESRA, §111(b)(1). IES replaced the Office of Educational Research and Improvement (OERI).

6 To see a list of the Director’s duties, see ESRA, §114(f).
ESRA also authorized the NBES (also known at the Board), which is tasked with advising and consulting with the Director on the policies of IES. Among other responsibilities, the Board considers and approves research priorities proposed by the Director; advises and approves procedures for technical and peer review; advises the Director on the funding of applications for grants, contracts, and cooperative agreements; provides recommendations to the Director on individuals to serve as Commissioners of the four IES research centers; and assesses the progress of and makes recommendations for the improvement of IES. ESRA specifies requirements related to members of the Board, including the composition of the Board, the qualification of the Board’s membership, compensation, and travel expenses.

Under the provisions of ESRA, as amended, IES is composed of four research centers: the National Center for Education Research (NCER), the National Center for Education Statistics (NCES), the National Center for Education Evaluation and Regional Assistance (NCEE), and the National Center for Special Education Research (NCSER). Three of the centers (NCER, NCEE, and NCSER) are headed by a Commissioner appointed by the Director for a term not to exceed six years (except that the Commissioner may be reappointed by the Director). The Commissioner of the fourth center, NCES, is appointed by the President for a term of six years. Each of the four research centers has specific duties outlined in ESRA and summarized below.

**National Center for Education Research**

Title I, Part B, of ESRA authorizes NCER “to sponsor sustained research that will lead to the accumulation of knowledge and understanding of education.” Specifically, the mission of NCER is to sponsor research that ensures that all children have access to a high-quality education; improves student academic achievement; closes the achievement gap between high-performing and low-performing students; and improves access to, and opportunities for, postsecondary education. NCER is also charged with supporting the synthesis and integration of research, promoting quality through the use of accepted practices of scientific inquiry, and promoting scientifically valid research findings.

The duties of NCER (outlined in ESRA, §133) include, but are not limited to, maintaining peer-review processes and standards for the conduct and evaluation of all research carried out at the center; proposing research plans to the Director; implementing a plan to carry out scientifically valid research; ensuring that research is relevant to education practice and policy; and synthesizing and disseminating research findings.

In carrying out these duties, the Commissioner of NCER is authorized to support not less than eight national research and development centers, which must support work on the following topics:

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7 To see a list of the Commissioners’ duties, see ESRA, §116(b).
8 The Board is to be composed primarily of researchers, see §116(c).
9 NCSER was added by the Individuals with Disabilities Education Act (IDEA; P.L. 108-446) in 2004.
10 Note that the NCES existed as a separate office within ED before the establishment of IES, and the Commissioner has historically been a presidential appointee. When NCES became a research center of IES, the type of appointment was not changed.
11 §131(b)(1).
• adult literacy;
• assessment, standards, and accountability research;
• early childhood development and education;
• improving low-achieving schools;
• innovation in education reform;
• state and local policy;
• postsecondary education and training;
• rural education;
• teacher quality; and
• reading and literacy.\(^\text{12}\)

Research and development centers are to address areas of national need and award competitive grants to support the centers. Awards are made for a period of not more than five years. Continuation grants may be made to research and development centers by the Director as long as no research and development center is supported for more than 10 years without undergoing a competitive process.

The Commissioner of NCER is responsible for carrying out a research plan that includes both basic and applied research and research conducted through field initiated research efforts as well as ongoing research initiatives. Not less than 50% of the funds made available for research in each fiscal year are to be used to fund long-term research programs of not less than five years.\(^\text{13}\)

### National Center for Education Statistics

ESRA Title I, Part C, authorizes NCES “to collect and analyze education information and statistics in a manner that meets the highest methodological standards.”\(^\text{14}\) The primary duty of NCES is to collect, acquire, compile, and disseminate statistics on the condition and progress of education from preschool through adulthood. NCES is to report education information and statistics in a timely manner; ensure that reports of education information and statistics are objective, secular, neutral, and non-ideological, free of partisan political influence and bias; and ensure that reports are relevant and useful to practitioners, researchers, policy makers, and the public.

Other duties of NCES (specified in ESRA, §153) include the following: publishing reports on the significance of the statistics collected; determining voluntary standards and guidelines for state educational agencies (SEAs) in developing statewide longitudinal data systems; and acquiring and disseminating information on student achievement in the United States compared with other

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\(^{12}\) Note that more than one topic can be supported by a research and development center and that the Commissioner is authorized to use “other means” to support work on these topics, as well.

\(^{13}\) Much of the research supported through NCER receives funding through education research grants programs. For more information on these programs and the topics addressed through these programs see http://ies.ed.gov/funding/ncer_progs.asp

\(^{14}\) §151(b)(1).
nations. The Commissioner of NCES is authorized to carry out these duties by awarding grants, contracts, or cooperative agreements and by providing technical assistance.

ESRA specifies that certain data must be collected on the following topics:

- state and local education reform activities;
- state and local early childhood school readiness activities;
- student achievement in reading, mathematics, and science;
- secondary school completions, dropouts, and adult literacy skills;
- information on teaching practice;
- instruction, the conditions of the education workplace, and the supply of and demand for teachers;
- the incidence, frequency, seriousness, and nature of violence affecting students and school personnel;
- the financing and management of education, including data on revenues and expenditures;
- the social and economic status of children;
- the existence and use of educational technology in elementary and secondary education schools;
- access to early childhood programs;
- the availability of before-school and after-school programs;
- student participation in secondary and postsecondary vocational and technical education by specific program area; and
- the existence and use of school libraries.\(^\text{15}\)

Further, these data must be disaggregated by gender; race; ethnicity; socioeconomic status; limited English proficiency; mobility; disability; urban, rural, and suburban districts; and other population characteristics, “when such disaggregated information will facilitate educational and policy decision making.”\(^\text{16}\)

National Center for Education Evaluation and Regional Assistance

ESRA Title I, Part D, authorizes NCEE to support evaluation, technical assistance, development and dissemination activities. Specifically, the mission of NCEE (outlined in §171(b)) is

- to provide technical assistance;
- to conduct evaluations of federal education programs administered by the Secretary (and as time and resources allow, other education programs) to

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\(^{15}\) More information on NCES surveys and programs can be found at http://nces.ed.gov/surveys/.

\(^{16}\) §153(a)(3).
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determine the impact of such programs (especially on student academic achievement in the core academic areas of reading, mathematics, and science);

• to support synthesis and wide dissemination of results of evaluation, research, and products developed; and

• to encourage the use of scientifically valid education research and evaluation throughout the United States.

The Commissioner of NCEE is authorized to carry out these duties by awarding grants, contracts, and cooperative agreements and by providing technical assistance.17

ESRA specifies a number of requirements for evaluations conducted by NCEE.18 Among other requirements, NCEE must establish evaluation methodology, and evaluations at NCEE must adhere to the highest possible standards of quality for conducting scientifically valid education evaluation and are subject to peer-review. NCEE is required to evaluate programs under Title I of the Elementary and Secondary Education Act (ESEA); and review and supplement other federal education program evaluations, particularly those supported or conducted by ED.19

Technical assistance duties of NCEE are primarily carried out through the Regional Educational Laboratories (REL) program. The Director of IES is required to enter into contracts with 10 RELs that serve the needs of children across the United States.20 Before entering into a contract, the Director must design specific objectives and measurable indicators to be used to assess the performance of the RELs.

RELs are supported to carry out applied research, development, dissemination, and technical assistance activities to meet the needs of the regions they serve. The central mission of the RELs involves the provision of training and technical assistance to SEAs, local educational agencies (LEAs), school boards, and state boards of education on the administration and implementation of the ESEA; scientifically valid research on teaching methods, assessment tools, and curriculum frameworks for use in a series of content areas; and the replication and adaptation of promising educational practices and methods. Additionally, the duties of the RELs include the facilitation of communication between educational experts, school officials, and teachers, parents, and librarians to assist schools in developing a plan to meet state education goals; surveying the needs of the region; developing a plan for serving those needs; carrying out applied research to serve the needs of the region; and engaging in a series of additional dissemination activities.21 The Commissioner of NCEE must provide for independent evaluations of each of the RELs and provide the results of such evaluations to the relevant committees of Congress, the NSEB, and the appropriate REL.

17 Among the entities supported through NCEE is the What Works Clearinghouse (WWC), which was designed to serve as a central source of scientific evidence on what works in education, and the Education Resources Information Center (ERIC), an online digital library of educational research and information. For information on either, see http://ies.ed.gov/sites.asp.
18 §173.
19 Prior to the establishment of IES, various offices within ED conducted evaluations. Most notably, the Office of Planning, Evaluation, and Policy Development conducted many ED evaluations. ED has been transitioning many evaluation functions to NCEE from other ED offices.
20 The 10 regions are those delineated in §941 of the Educational Research, Development, Dissemination, and Improvement Act of 1994 (P.L. 103-227).
21 The mission and duties of the RELs are described in ESRA, §174(f).
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National Center for Special Education Research

ESRA Title I, Part E, authorizes NCSER to sponsor research to expand knowledge and understanding of the needs of infants, toddlers, and children with disabilities in order to improve the developmental, educational, and transitional results of such individuals; to sponsor research to improve services provided under and support the implementation of the Individuals with Disabilities Education Act (IDEA); and to evaluate the implementation of IDEA.22

The duties of NCSER (specified in §177 of ESRA) include, but are not limited to, the following: improving services under IDEA; identifying scientifically based practices that support learning and improve academic achievement; identifying scientifically based services and interventions that promote participation and progress in general education curriculum and settings; improving the alignment of state standards and alternate assessments for students with significant cognitive disabilities; examining the over-identification and under-identification of children with disabilities and causes thereof; improving personnel preparation; examining the excess cost of educating students with disabilities; and examining the special needs of limited English proficient children with disabilities.

The Commissioner of NCSER is authorized to carry out these duties by awarding grants, contracts, or cooperative agreements to eligible applicants.23 Research activities at NCSER are to be carried out in accordance with the standards for conduct and evaluation of all research and development activities established by NCER. NCSER is also tasked with synthesizing and disseminating the findings and results of special education research conducted at the center.

General Provisions

ESRA Title I, Part F, contains a number of provisions regarding prohibitions, confidentiality, availability of data, performance management, authority to publish, and staffing considerations (e.g., vacancies, scientific or technical employees, fellowships). This part also includes an authorization of appropriations for Title I of ESRA. For FY2003, Section 194 authorized $400 million to carry out Title I of P.L. 107-279 (not including the RELs), and such sums as may be necessary for each of the five succeeding fiscal years. For the RELs, Section 194 authorized $100 million for FY2003 and such sums as may be necessary for each of the five succeeding fiscal years.

Educational Technical Assistance Act

Title II of P.L. 107-297 is entitled the Educational Technical Assistance Act (ETAA). This act authorizes the Secretary to award grants to local entities for the purpose of supporting technical assistance and evaluation and to award grants to states for statewide, longitudinal data systems. The Secretary is authorized to award not less than 20 grants for comprehensive centers for

22 IDEA Title II (P.L. 108-446) amended ESRA to establish NCSER.
23 For more information on the research supported through NCSER education research grants programs, see http://ies.ed.gov/funding/ncser_progs.asp.
technical assistance to local entities across 10 geographic regions. Each comprehensive center must work with SEAs, LEAs, and schools in the region where the center is located.

ETAA outlines a number of authorized activities for the comprehensive centers, including but not limited to, the following: (1) providing training, professional development, and technical assistance for the implementation of programs under the ESEA; (2) disseminating and providing information, reports, and publications to improve academic achievement and close achievement gaps; and (3) developing teacher and school leader in-service and pre-service training models that reflect best practices in the use of technology.

Each comprehensive center must coordinate activities with its local REL, NCEE, the Office of the Secretary, the state service agency, and other technical assistance providers. Each comprehensive center must also establish an advisory board and report annually to the Secretary. The Secretary must conduct ongoing independent evaluations of the comprehensive centers and report to the appropriate congressional committees and the Director of IES.

ETAA also authorizes the Secretary to make competitive grants to SEAs to design, develop, and implement statewide longitudinal data systems to use data more efficiently, consistent with the needs of the ESEA. In awarding grants, the Secretary must ensure that applications are of adequate technical quality and address the data uses required by the ESEA, as well as any other reporting requirements related to closing achievement gaps.

For FY2003, Section 209 authorized $80 million to carry out activities in Title II of P.L. 107-279 and such sums as may be necessary for each of the five succeeding fiscal years.

National Assessment of Educational Progress Authorization Act

Title III of P.L. 107-297 is entitled the National Assessment of Educational Progress Authorization Act (NAEPAA). This act establishes the National Assessment Governing Board (known as NAGB or the “Assessment Board”) and charges the Commissioner of Education Statistics with conducting the National Assessment of Educational Progress (NAEP).

NAEP is a series of assessments that includes a national assessment program, a state assessment program, a long-term trend study, and a trial urban district assessment program. The national assessment program is the only national assessment of student achievement in reading and mathematics and is administered every two years to grades 4 and 8 (assessments in other subjects, such as writing, civics, and the arts, as well as to students in grade 12 are given less frequently). States may choose to participate in the state assessment program by facilitating administration of NAEP to a sample size sufficient for state-level results. NAEPAA Section 303(d) indicates that participation in the NAEP assessment is voluntary for “students, schools, and local educational agencies.”

24 Note that the geographic regions must coincide with the regions served by the RELs.

25 The duties and composition of the advisory board are outlined in ESRA, §203(g).

26 ESEA Section 1111(c)(2) requires state participation in the state assessment program beginning with the 2002-2003 school year provided that the Secretary pays all administration costs.
The Assessment Board formulates policy guidelines for NAEP and consists of a broad array of stakeholders, including governors, state legislators, chief state school officers, members of state and local boards of education, representatives from local educational agencies (such as superintendents, teachers, and parents), and testing and measurement experts. The Director of IES is a non-voting member of the Assessment Board. NAEPAA sets the following duties for the Assessment Board:27

- select the subject areas to be assessed beyond the required subjects of reading and mathematics;
- develop appropriate student achievement levels;
- develop assessment objectives and test specifications that produce an assessment that is valid and reliable, and are based on relevant widely accepted professional standards;
- develop a process for review of the assessment that includes the active participation of teachers, curriculum specialists, local school administrators, parents, and concerned members of the public;
- design the methodology of the assessment to ensure that assessment items are valid and reliable, in consultation with appropriate technical experts in measurement and assessment, content and subject matter, sampling, and other technical experts who engage in large scale surveys;
- measure student academic achievement in grades 4, 8, and 12 in the authorized academic subjects;
- develop guidelines for reporting and disseminating results;
- develop standards and procedures for regional and national comparisons;
- take appropriate actions needed to improve the form, content, use, and reporting of results; and
- plan and execute the initial public release of National Assessment of Educational Progress reports.

For FY2003, $4.6 million was authorized to carry out activities related to the National Assessment Governing Board, $107.5 million to carry out activities related to the NAEP, and such sums as may be necessary for each of the five succeeding fiscal years.

27 NAEPAA, §302(e).
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